Statistics of Hawaii Agriculture
2000

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GENERAL

CROPS

LIVESTOCK

MISCELLANEOUS STATISTICS

HAWAII AGRICULTURE 2000

Diversified Agriculture Overcomes Adversity to Post Record Returns

Farm level revenue for 2000 totaled $521 million, 2 percent less than 1999, but still the second highest total in the past 9 years. The sixth record high year in a row for the diversified agriculture sector came up shy of offsetting the effects of lower sugar prices and the closure of two sugar operations. Pineapple, the State's leading commodity, held steady with the previous year. Drought-like conditions continued to plague many areas of the State for the third year, seriously impacting orchard crops such as fruits, coffee, and macadamia nuts, as well as cattle grazing. In spite of the weather, and global price declines for some commodities, diversified agriculture posted farm level revenues at a record $357 million, 4 percent above the 1999 record.

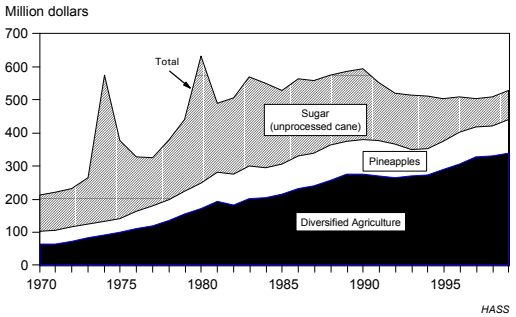
Highlighting gains in the diversified sector were record farm receipts for vegetables and melons, ginger root, flowers and nursery products, aquaculture, seed crop research and sales, and bananas, along with gains posted for tropical specialty fruits, papayas, and cattle. Improved prices helped boost cattle receipts, but the increase was also, in part, a result of increased marketings as ranchers were forced to reduce herd sizes due to drought-related scarce forage supplies. Drought and low prices also adversely affected macadamia nut and coffee production and returns.

The equivalent farm value of pineapple production (does not include the value added by processing) surpassed $100 million for the second year in a row, just slightly above the previous year. A small increase in production and an increase in the value of processed utilization offset a decline in the value of fresh sales.

The equivalent farm value of sugarcane (does not include the processed value of raw sugar) fell to $62 million, $24 million below 1999. Culprits for the decline were lower world (and foreign government subsidized) prices for sugar, and the phasing out of some operations during the year. At years' end there was optimism among the remaining sugar companies that the futures of their operations were viable and acreage and production would stabilize or increase.

Farm level values are an important measure of production agriculture, but they don't truly reflect the total contribution of agriculture to the State and county economies. Adding the values of sugar and pineapple processing raises the total to $585 million for 2000, but even that is still incomplete. For a better understanding of other value added contributions and the direct and indirect business activity associated with agriculture refer to "Accounting for the linkages of Agriculture in Hawaii's Business Economy with an input-output Model: A Final Demand-Based Approach" By University of Hawaii Agricultural Economists Khem R. Sharma, PingSun Leung, and Stuart Nakamoto.

Cash Receipts of Agricultural Commodities, State of Hawaii, 1970-99



Dry Year Impacts Agriculture Sectors

Despite a few additional days of showers during the year, the absence of consistent rainfall continued to hamper agriculture again in 2000. Although the predominately trade wind weather brought cloudy days and scattered light to moderate showers to all areas, the majority of days were warm and sunny with strong, gusty trade winds. As in the previous year, crops which depend on rainfall failed to make good progress. Such crops included coffee, macadamia nut, avocado, guava, and other fruits. Pastures were also adversely affected by the lack of moisture, since they depended on natural rainfall for growth and rejuvenation. Ranchers continued to reduce their herds due to the deteriorated pastures. Although irrigated crops fared better with the stable weather and consistent water, some farms were adversely affected by both mandatory and voluntary water conservation measures implemented during the year. Despite the increase in moist periods over the previous year, the overall condition of the State was still dry, especially the leeward sections of Maui and Hawaii islands.

January-April

The first two weeks in January were fair to good for agriculture. Days were mostly sunny to partly cloudy with light to moderate showers. Towards the end of the third week, a shear line brought dark clouds and heavy showers to the islands; followed by strong winds which further hindered field operations and damaged crops. The rains continued into the fourth week and caused some flooding in fields that were already saturated by the previous week's rain. Weather became sunnier in February with less rain, giving farmers a chance to catch up on field activities. Despite the absence of significant rainfall, the sunny days, cool nights, and gentle winds, along with regular irrigation enhanced crop progress. March brought more sunny, dry weather which benefitted most crops. However, the prolonged dry spell caused growing concern among farmers and water officials, and water restrictions were issued. Trade wind showers falling during the end of the month brought some relief, but more rain was needed. A cold front from the northwest brought much needed rain in early April. The heavy showers hit Kauai with 4 inches of rain and moved down the island chain, dropping about 3 inches on many windward areas. Considerably lighter rains fell on leeward areas, which remained relatively dry throughout the month. Gusty winds early in the month hampered spraying and irrigation as well as causing leaf and fruit damage. A decrease in winds and shower activity created favorable weather for the rest of the month.

May-September

The first half of May experienced gentle trade winds, light windward showers, and longer days with warmer temperatures. The remainder of the month received generally dry weather, especially in the leeward areas. Increased spraying and irrigation was necessary to maintain crop progress. Pastures and non-irrigated orchards continued to feel the adverse effects of lack of moisture. Dry, sunny conditions marked the beginning of summer in June. Irrigated crops made fair to good progress, while pastures and non-irrigated crops remained in fair to poor condition. Light, scattered showers brought some relief, but additional rainfall was needed to replenish soil moisture. Summer rains in July brought some relief, but more rainfall was needed. Temperatures climbed into the upper 80's; occasionally reaching 90 degrees F. The remnants of Hurricanes Gilma and Hector brought some moderate to heavy showers in late August to central Oahu and windward sections of Hawaii. Leeward areas remained dry.

October-December

The record thunderstorm on the Big Island punctuated the rainy season on November 1 and 2. Nearly 37 inches of rain fell on windward Hawaii within a 24 hour period. Ka'u macadamia nut orchards suffered the heaviest nut and tree loss due to flooding and erosion. Puna anthurium and tropical flower growers reported 30-50 percent losses due to flooding. The flood waters also damaged roads, green houses, and irrigation systems. Livestock losses of goats and some cattle were reported along with damage to barns, warehouses, and other structures. Control measures were increased to control plant diseases stimulated by the wet conditions. On a positive note, the rain brought much needed moisture to the parched areas of Kona, South Kohala, Maui, and Molokai. The remainder of the year ended with generally fair weather; leeward areas returned to their dry condition.

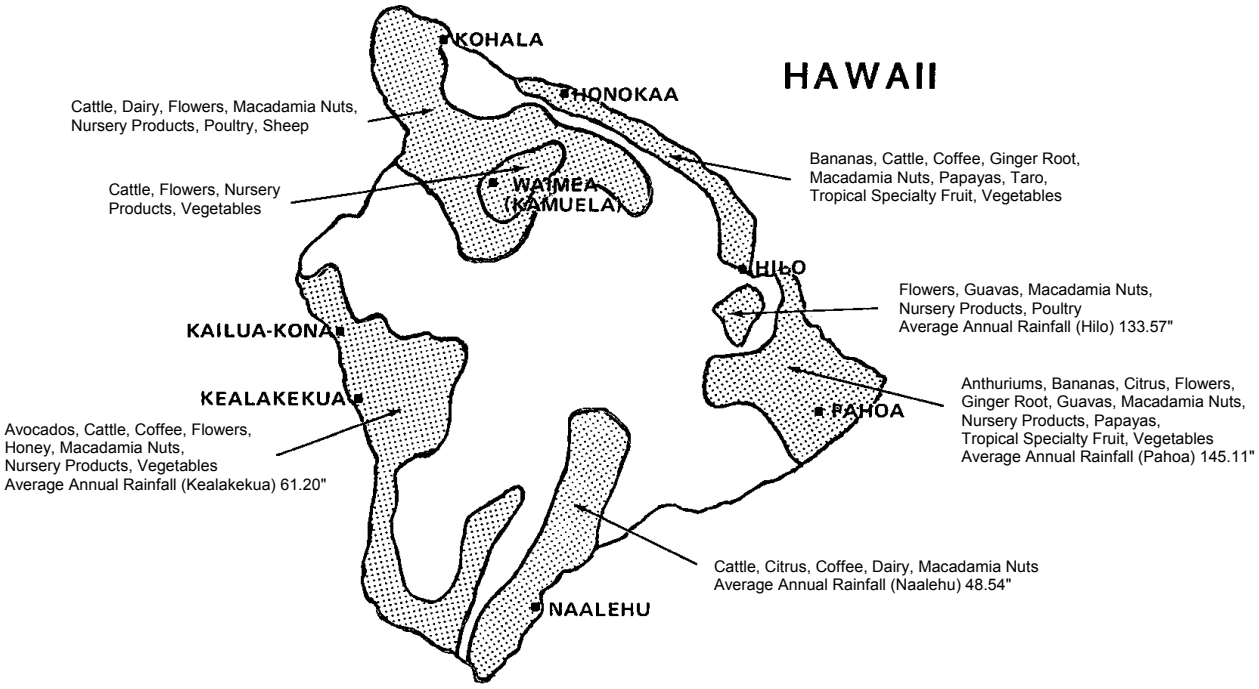
WEATHER: Precipitation, selected stations, State of Hawaii, 2000

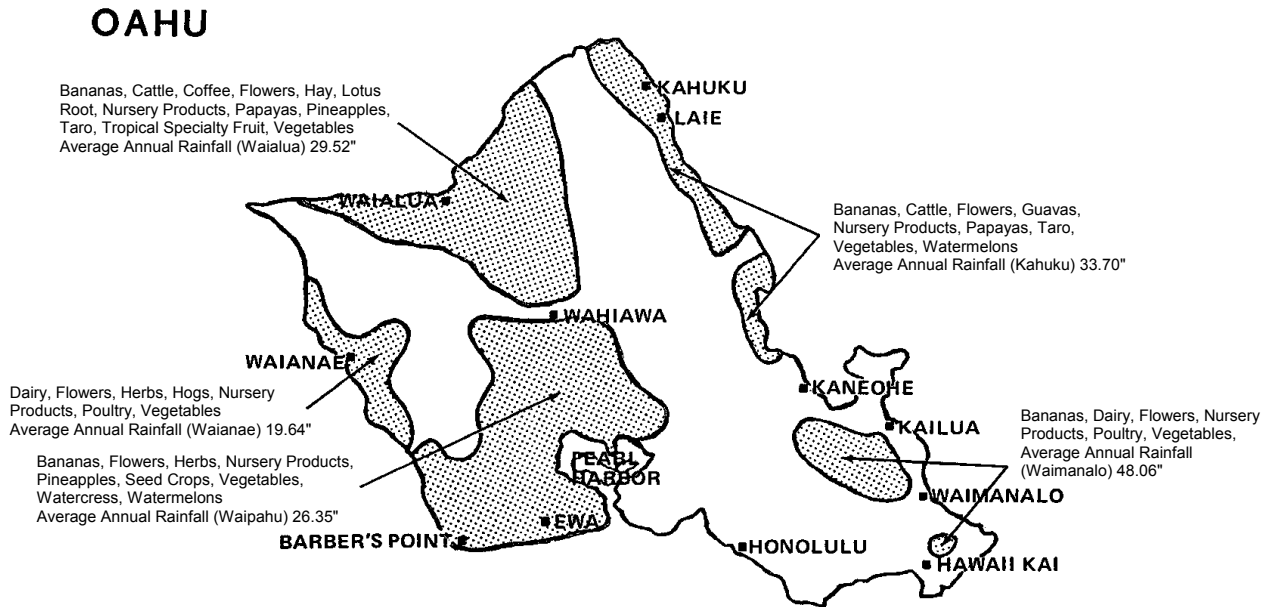
STATIONS	Year & normal	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual	% Annual normal
ISLAND OF HAWAII															
Hilo International Airport	Normal	9.1	12.9	13.7	12.9	10.0	6.6	9.5	10.9	7.4	11.0	13.8	15.8	133.6	
	2000	17.87	.52	5.81	7.25	3.36	8.19	13.16	10.54	9.20	17.65	45.90	4.59	144.04	107.8
Kamuela (HI86)	Normal	6.6	6.0	7.9	6.9	4.0	2.2	3.7	4.1	2.2	3.3	5.8	7.3	60.0	
	2000	6.07	.24	1.14	4.31	1.81	2.40	1.68	2.75	1.36	4.19	4.18	.40	30.53	50.9
Kealakekua (HI84)	Normal	4.7	3.4	5.6	6.2	7.7	8.2	8.7	8.3	8.2	6.2	4.4	3.4	75.0	
	2000	1.54	.05	1.97	1.82	3.42	6.85	4.17	2.57	2.22	3.05	5.54	.19	33.39	44.5
Laupahoehoe (HI80)	Normal	13.5	13.2	19.5	18.9	11.7	6.2	10.0	12.4	6.9	9.3	13.6	14.8	150.0	
	2000	21.00	.10	5.00	13.04	2.76	3.67	7.55	13.70	6.86	11.98	22.62	1.67	109.95	73.3
Pahala (HI85)	Normal	7.7	6.1	6.3	5.0	3.8	2.2	2.1	3.3	3.4	4.2	5.5	5.4	55.0	
	2000	1.06	1.05	4.60	.04	.66	1.60	1.12	3.86	5.60	2.59	28.36	.24	50.78	92.3
Pahoa (HI83)	Normal	13.9	10.9	14.7	13.9	10.5	7.1	9.8	10.6	9.2	11.5	13.3	14.6	140.0	
	2000	16.57	.75	5.79	11.06	3.08	9.20	12.42	8.31	5.22	14.06	39.52	5.48	131.46	93.9
ISLAND OF KAUAI															
Anahola (HI48)	Normal	6.8	4.4	6.0	4.6	3.2	1.6	2.5	2.5	2.0	5.1	5.4	5.9	50.0	
	2000	3.87	.18	1.62	1.84	.05	1.70	1.97	.42	2.12	.79	1.08	4.35	19.99	40.0
Hanalei (HI45)	Normal	11.3	10.1	14.0	12.7	8.1	5.3	8.6	6.3	4.7	7.0	12.2	9.7	110.0	
	2000	10.10	.61	4.71	10.72	1.29	5.87	10.59	6.93	3.29	5.82	5.34	9.19	74.46	67.7
Omao (HI51)	Normal	6.9	4.5	5.5	5.2	4.2	3.4	4.7	4.6	3.7	4.7	5.9	6.7	60.0	
	2000	6.21	.60	2.84	7.32	.68	2.59	2.82	3.18	3.22	2.70	4.52	.93	37.61	62.7
ISLAND OF MAUI															
Hana (HI61)	Normal	9.5	6.8	9.5	9.0	6.2	3.8	5.6	5.6	5.4	7.0	8.7	6.1	83.2	
	2000	6.33	.61	2.53	3.79	--	3.96	6.27	8.92	7.01	15.55	16.01	1.98	72.96	87.7
Kula (HI65)	Normal	4.9	3.7	2.8	2.8	2.1	1.1	1.4	1.9	2.0	1.4	2.5	3.4	30.0	
	2000	1.19	0	.87	.36	.08	1.84	.06	.91	1.02	.75	4.77	.10	11.95	39.8
Wailuku (HI66)	Normal	5.2	3.8	3.6	3.0	1.2	.4	.6	.7	.6	1.7	2.9	4.3	28.0	
	2000	2.21	.12	.96	1.69	.01	.21	.37	.95	.75	.87	4.13	.23	12.50	44.6
ISLAND OF OAHU															
Kahuku (HI09)	Normal	6.3	4.2	5.3	4.0	2.5	1.8	2.2	2.6	2.2	4.0	4.6	5.3	45.0	
	2000	2.45	.30	1.11	2.44	.90	1.38	2.56	1.13	2.86	3.37	2.34	1.35	22.19	49.3
Waialua (HI04)	Normal	5.6	3.9	3.8	2.8	1.7	.9	1.3	.8	1.1	2.7	4.2	5.0	33.8	
	2000	1.65	.30	1.48	1.48	.47	2.09	.64	.40	.48	.57	2.21	.71	12.48	36.9
Waianae (HI17)	Normal	3.8	2.3	2.5	1.6	.7	.3	.3	.7	.7	1.8	2.0	3.3	20.0	
	2000	.16	.02	.18	.16	.06	.17	.16	.12	.54	.27	1.47	.16	3.47	17.4
Waimanalo (HI13)	Normal	8.1	4.9	5.6	4.9	3.1	1.5	1.7	2.0	1.8	4.3	4.9	7.2	50.0	
	2000	2.48	.29	3.33	1.83	.24	.62	.70	1.16	2.54	2.45	2.87	.95	19.46	38.9

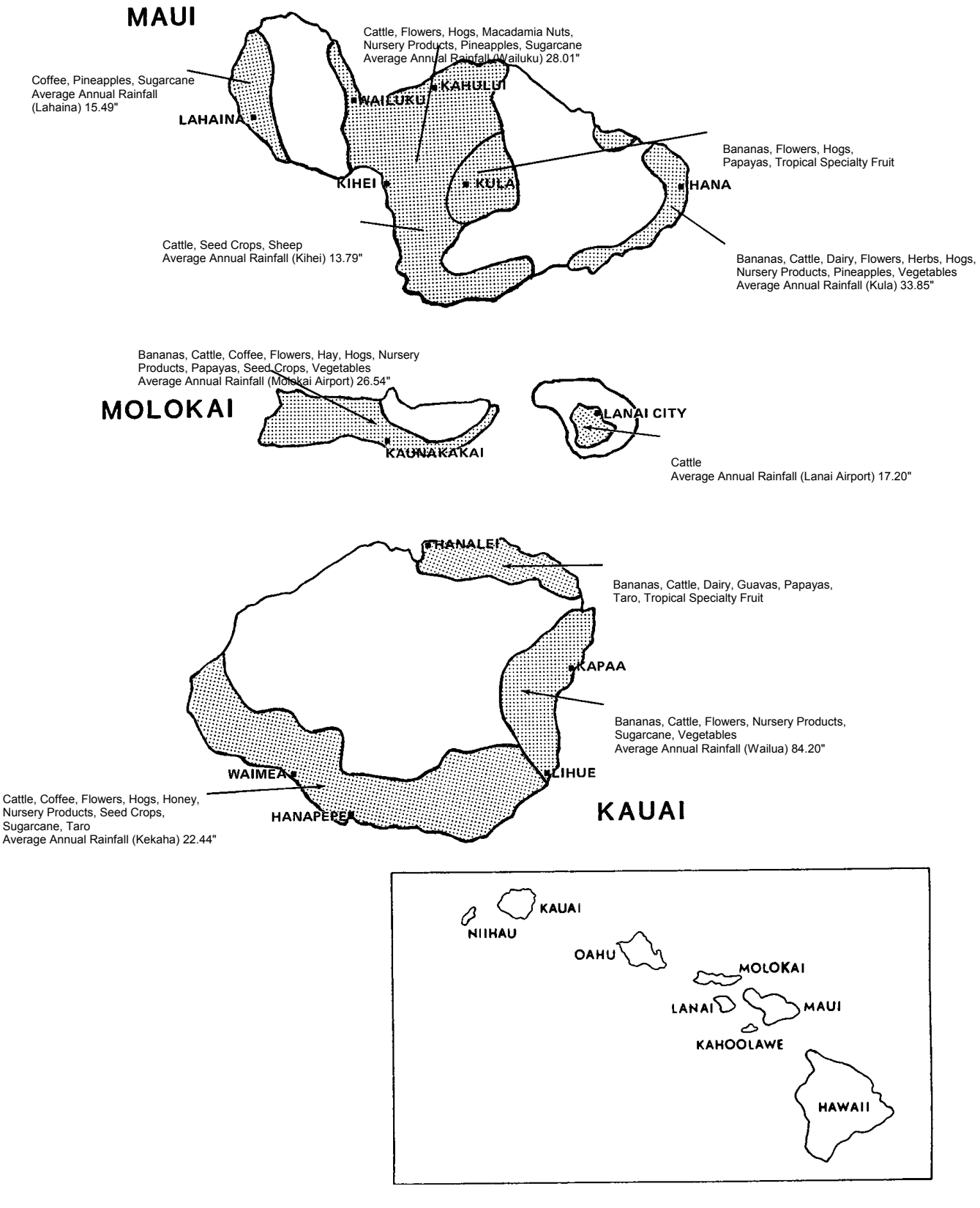
-- = Missing data; incomplete.

Source: U. S. Department of Commerce, National Oceanic and Atmospheric Administration. Most rainfall stations were selected from the National Weather Service's hydronet system of automated gages, and those data have not been quality controlled to date, and therefore is not certified by the National Weather Service.

MAJOR AGRICULTURAL AREAS, STATE OF HAWAII, 2000






MAUI
Cattle, Flowers, Hogs, Macadamia Nuts,
Nursery Products, Pineapples, Sugarcane
Average Annual Rainfall (Wailuku) 28.01"
Coffee, Pineapples, Sugarcane
Average Annual Rainfall
(Lahaina) 15.49"
KAHULUI
WAILUKU
LAHAINA
Bananas, Flowers, Hogs,
Papayas, Tropical Specialty Fruit
KIHEI
KULA
HANA
Cattle, Seed Crops, Sheep
Average Annual Rainfall (Kihei) 13.79"
Bananas, Cattle, Dairy, Flowers, Herbs, Hogs,
Nursery Products, Pineapples, Vegetables
Average Annual Rainfall (Kula) 33.85"
Bananas, Cattle, Coffee, Flowers, Hay, Hogs, Nursery
Products, Papayas, Seed Crops, Vegetables
Average Annual Rainfall (Molokai Airport) 26.54"
MOLOKAI
LANAI CITY
KAUNAKAKAI
Cattle
Average Annual Rainfall (Lanai Airport) 17.20"
HANALEI
Bananas, Cattle, Dairy, Guavas, Papayas,
Taro, Tropical Specialty Fruit
KAPAA
Bananas, Cattle, Flowers, Nursery Products,
Sugarcane, Vegetables
Average Annual Rainfall (Wailua) 84.20"
WAIMEA
LIHUE
Cattle, Coffee, Flowers, Hogs, Honey,
Nursery Products, Seed Crops,
Sugarcane, Taro
Average Annual Rainfall (Kekaha) 22.44"
HANAPEPE
KAUAI
KAUAI
NIIHAU
OAHU
MOLOKAI
LANAI
MAUI
KAHOOLAWE
HAWAII

Top 20 commodities, State of Hawaii, 1999-2000

Commodity [1]	Rank		Value of production	
	1999	2000	1999	2000
	--- Number ---		--- 1,000 dollars ---	
Pineapples (fresh equivalent)	1	**1**	101,448	**101,530**
Sugarcane (unprocessed)	2	**2**	86,800	**62,600**
Seed crops	4	**3**	30,500	**35,400**
Macadamia nuts	3	**4**	37,855	**29,500**
Milk	5	**5**	31,270	**28,102**
Coffee	6	**6**	21,000	**23,055**
Cattle	7	**7**	16,806	**19,204**
Papayas	8	**8**	15,929	**16,007**
Eggs	9	**9**	10,803	**10,636**
Bananas	10	**10**	8,575	**10,440**
Ginger root	11	**11**	8,050	**8,910**
Tomatoes	12	**12**	7,896	**8,580**
Algae	13	**13**	7,883	**8,447**
Palms (potted)	16	**14**	6,306	**8,334**
Anthuriums	14	**15**	6,725	**7,352**
Dracaena (potted)	15	**16**	6,333	**6,648**
Dendrobium, pots	17	**17**	5,640	**6,588**
Hogs	18	**18**	5,072	**4,425**
Taro	19	**19**	3,604	**3,710**
Basil	20	**20**	3,420	**3,600**

NA = Not available.
[1] Floriculture categories include only growers with total sales of $10,000 or more.

Farm values, State of Hawaii, 1981-2000

Year	Sugar (unprocessed cane)	Pineapples (fresh equivalent)	Diversified agriculture [1]	Total
		1,000 dollars		
1981	207,500	89,745	192,257	478,502
1982	230,800	94,364	182,104	507,268
1983	266,900	100,376	201,138	568,414
1984	256,200	89,928	204,389	550,517
1985	222,400	90,530	215,719	528,649
1986	233,800	99,720	231,197	564,717
1987	218,000	99,286	240,012	557,298
1988	209,900	107,402	256,660	573,962
1989	210,300	98,310	276,438	585,048
1990	213,800	106,365	275,789	595,954
1991	174,900	107,775	268,707	551,382
1992	153,700	102,100	264,427	520,227
1993	163,000	79,850	271,094	513,944
1994	160,100	78,890	273,826	512,816
1995	127,700	87,360	[2] 291,632	[2] 506,692
1996	108,100	95,914	[2] 307,329	[2] 511,343
1997	85,500	91,721	[2] 327,484	[2] 504,705
1998	87,400	92,776	329,886	510,062
1999	86,800	101,448	342,846	531,094
2000	**62,600**	**101,530**	**357,279**	521,409

[1] Aquaculture included beginning 1993.
[2] Revised.

Diversified agriculture ranked by value, State of Hawaii, 1999-2000

Commodity	Rank		Value of production			Percent of diversified agriculture	
	1999	2000	1999	2000	Year-to-year percent change	1999	2000
	--- Number ---		------ 1,000 dollars ------		---------- Percent ----------		
Flowers and nursery products	1	**1**	75,725	**83,380**	**+10**	22.1	**23.3**
Vegetables and melons [1]	2	**2**	56,438	**59,761**	**+6**	16.5	**16.7**
Seed crops	5	**3**	30,500	**35,400**	**+16**	8.9	**9.9**
Fruits (excluding pineapples)	6	**4**	28,525	**31,364**	**+10**	8.3	**8.8**
Macadamia nuts	3	**5**	37,855	**29,500**	**-22**	11.0	**8.3**
Milk	4	**6**	31,270	**28,102**	**-10**	9.1	**7.9**
Coffee	7	**7**	21,000	**23,055**	**+10**	6.1	**6.4**
Aquaculture	8	**8**	18,102	**22,170**	**+22**	5.3	**6.2**
Cattle	9	**9**	16,806	**19,204**	**+14**	4.9	**5.4**
Eggs	10	**10**	10,803	**10,636**	**-2**	3.2	**3.0**
Hogs	11	**11**	5,072	**4,425**	**-13**	1.5	**1.2**
Other livestock and crops			10,750	**10,282**	**-4**	3.1	**2.9**
Total			342,846	**357,279**	**+4**	100.0	**100.0**

[1] Includes ginger root and herbs.

SUMMARY: Acreage in crop and total farm acreage, by counties, 1996-2000

Year	Sugarcane	Pineapples [1]	Vegetables and melons [2] [3]	Fruits (excluding pineapples)	Coffee	Macadamia nuts	All other crops [4]	Total farm acreage [5]
				1,000 acres				
State [6]								
1996	68.8	20.0	6.2	7.1	6.6	20.2	8.4	1,440
1997	68.7	19.9	6.5	8.0	7.0	20.2	13.3	1,440
1998	67.6	21.0	6.6	7.6	7.4	20.2	15.9	1,440
1999	67.0	21.0	8.2	8.0	7.7	19.9	16.2	1,440
2000	**60.0**	**20.7**	**6.4**	**7.1**	**7.9**	**18.4**	**15.9**	**1,440**
Counties:								
Hawaii								
1996	0	*	2.1	5.3	2.2	[7]	1.7	870
1997	0	*	2.1	5.6	2.5	[7]	1.7	870
1998	0	*	2.1	4.8	2.8	[7]	2.0	870
1999	0	*	2.3	4.9	3.2	[7]	2.3	870
2000	**0**	*****	**1.8**	**4.1**	**3.3**	**[7]**	**1.9**	**870**
Honolulu								
1996	0	10.7	2.5	.8	[7]	[7]	4.0	80
1997	0	10.8	2.9	1.3	[7]	[7]	8.3	80
1998	0	11.4	2.8	1.6	[7]	[7]	11.0	80
1999	0	11.9	4.3	1.8	[7]	[7]	10.9	80
2000	**0**	**9.1**	**3.1**	**1.7**	**[7]**	**[7]**	**11.0**	**80**
Kauai								
1996	26.5	*	.1	.8	[7]	[7]	1.3	200
1997	25.6	*	.1	.8	[7]	[7]	1.6	200
1998	24.7	*	.1	.9	[7]	[7]	1.0	200
1999	23.7	*	.2	1.0	[7]	[7]	1.1	200
2000	**23.1**	*****	**.2**	**1.0**	**[7]**	**[7]**	**1.1**	**200**
Maui								
1996	42.3	9.3	1.5	.2	[7]	[7]	1.4	290
1997	43.1	9.1	1.4	.3	[7]	[7]	1.7	290
1998	42.9	9.6	1.6	.3	[7]	[7]	1.9	290
1999	43.3	9.1	1.4	.3	[7]	[7]	1.9	290
2000	**36.9**	**11.6**	**1.3**	**.3**	**[7]**	**[7]**	**1.9**	**290**

* = Less than 50 acres.
[1] Land used for pineapple.
[2] Harvested acreage.
[3] Includes ginger root.
[4] Includes taro, seed corn, feed and forage crops (excluding pineapple feed products), flowers, foliage and nursery products.
[5] Includes land not in crop and pasture such as farm house lots, roads, woodlots, etc.
[6] Sum of county estimates may not add to State total due to rounding.
[7] Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

SUMMARY: Number of crop farms, by counties, 1996-2000

Year	Sugarcane	Pineapples [1]	Vegetables and melons	Fruits (excluding pineapples)	Coffee	Macadamia nuts	Taro	Flowers and nursery products
State								
1996	7	20	950	1,040	560	750	180	690
1997	4	15	1,000	1,043	585	800	160	670
1998	4	15	880	1,515	610	800	180	745
1999	4	15	1,020	1,373	650	750	190	765
2000	**3**	**15**	**580**	**1,254**	**670**	**650**	**185**	**755**
Counties:								
Hawaii								
1996	1	8	400	720	550	[2]	100	316
1997	0	6	440	704	575	[2]	85	312
1998	0	5	432	912	600	[2]	100	355
1999	0	5	600	805	635	[2]	100	355
2000	**0**	**5**	**250**	**705**	**650**	**[2]**	**85**	**365**
Honolulu								
1996	1	2	395	135	[2]	[2]	4	211
1997	0	2	400	129	[2]	[2]	10	202
1998	0	2	280	186	[2]	[2]	11	205
1999	0	2	230	174	[2]	[2]	12	225
2000	**0**	**2**	**160**	**162**	**[2]**	**[2]**	**15**	**215**
Kauai								
1996	3	4	50	100	[2]	[2]	54	52
1997	2	3	55	124	[2]	[2]	50	50
1998	2	3	54	155	[2]	[2]	55	40
1999	2	3	45	143	[2]	[2]	65	35
2000	**2**	**3**	**50**	**156**	**[2]**	**[2]**	**70**	**35**
Maui								
1996	2	6	105	85	[2]	[2]	22	111
1997	2	4	105	86	[2]	[2]	15	106
1998	2	5	114	262	[2]	[2]	14	145
1999	2	5	145	251	[2]	[2]	13	150
2000	**1**	**5**	**120**	**231**	**[2]**	**[2]**	**15**	**140**

[1] Includes specialty pineapple.
[2] Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

SUMMARY: Number of livestock operations and total number of farms, by counties, 1996-2000

Year	Cattle [1]	Hogs	Milk	Eggs	Honey	Total (non-duplicated) [2]
State						
1996	850	250	60	55	25	5,400
1997	830	250	50	55	23	5,500
1998	830	250	50	55	29	5,500
1999	800	230	50	55	28	5,500
2000	**800**	**230**	**50**	**55**	**33**	**5,500**
Counties:						
Hawaii						
1996	470	80	30	25	16	3,250
1997	480	90	27	25	14	3,300
1998	480	80	27	26	18	3,300
1999	470	70	28	28	14	3,300
2000	**470**	**70**	**28**	**28**	**17**	**3,300**
Honolulu						
1996	60	70	15	19	[3]	900
1997	50	70	10	19	[3]	900
1998	50	80	10	17	[3]	900
1999	60	70	10	15	[3]	900
2000	**60**	**70**	**10**	**15**	**[3]**	**900**
Kauai						
1996	130	40	10	4	[3] 9	450
1997	120	30	8	4	[3] 9	500
1998	120	40	8	4	[3] 11	500
1999	100	30	8	4	[3] 14	500
2000	**100**	**30**	**8**	**4**	**[3] 16**	**500**
Maui						
1996	190	60	5	7	[3]	800
1997	180	60	5	7	[3]	800
1998	180	50	5	8	[3]	800
1999	170	60	4	8	[3]	800
2000	**170**	**60**	**4**	**8**	**[3]**	**800**

[1] Includes beef, dairy, and dairy replacement operations.
[2] Based on farm definition of $1,000 or more of agricultural sales.
[3] Honolulu and Maui combined with Kauai to avoid disclosure of individual operations.

SUMMARY: Value of crop sales, by counties, 1996-2000

Year	Sugar (unprocessed cane)	Pineapples (fresh equivalent)	Vegetables, ginger root, herbs, and melons	Fruits (excluding pineapples)	Coffee (parchment)
			1,000 dollars		
State					
1996	108,100	95,914	40,672	26,521	20,800
1997	85,500	91,721	[3] 46,271	29,564	28,200
1998	87,400	92,776	51,149	24,530	24,700
1999	86,800	101,448	56,438	28,525	21,000
2000	**62,600**	**101,530**	**59,761**	**31,364**	**23,055**
Counties:					
Hawaii					
1996	1,700	*	16,140	20,646	10,810
1997	0	*	[3] 17,435	21,018	16,245
1998	0	*	16,249	14,672	16,100
1999	0	*	18,569	15,546	9,300
2000	**0**	*****	**17,910**	**17,522**	**15,200**
Honolulu					
1996	10,400	68,770	12,554	2,640	[4]
1997	0	63,426	[3] 16,224	4,814	[4]
1998	0	64,363	22,098	6,487	[4]
1999	0	73,123	27,419	8,535	[4]
2000	**0**	**72,085**	**30,836**	**8,985**	**[4]**
Kauai					
1996	38,800	*	326	2,377	[4]
1997	31,600	*	850	2,596	[4]
1998	28,700	*	1,047	2,320	[4]
1999	26,600	*	931	3,389	[4]
2000	**18,700**	*****	**1,446**	**3,755**	**[4]**
Maui					
1996	57,200	27,144	11,652	858	[4]
1997	53,900	28,295	[3] 11,762	1,136	[4]
1998	58,700	28,413	11,755	1,051	[4]
1999	60,200	28,325	9,519	1,056	[4]
2000	**43,900**	**29,445**	**9,569**	**1,102**	**[4]**

See footnotes at end of table.

Continued

SUMMARY: Value of crop sales, by counties, 1996-2000 -- Continued

Year	Macadamia nuts (in-shell)	Taro	Seed crops	Flowers and nursery products [1]	Total crops [2]
			1,000 dollars		
State					
1996	44,070	2,793	20,250	68,870	428,671
1997	43,500	2,805	25,150	66,655	[3] 420,306
1998	37,375	3,180	25,300	73,207	420,734
1999	37,855	3,604	30,500	75,725	443,111
2000	**29,500**	**3,710**	**35,400**	**83,380**	**430,961**
Counties:					
Hawaii					
1996	[4]	689	[4]	34,275	125,428
1997	[4]	698	[4]	34,501	[3] 130,737
1998	[4]	627	[4]	39,153	121,676
1999	[4]	632	[4]	42,462	121,939
2000	**[4]**	**506**	**[4]**	**47,811**	**128,379**
Honolulu					
1996	[4]	[4]	[4]	25,115	121,045
1997	[4]	[4]	[4]	22,131	[3] 109,072
1998	[4]	[4]	[4]	23,743	124,630
1999	[4]	[4]	[4]	21,865	142,407
2000	**[4]**	**[4]**	**[4]**	**24,161**	**149,538**
Kauai					
1996	[4]	1,536	[4]	1,965	65,754
1997	[4]	1,657	[4]	1,804	59,425
1998	[4]	1,976	[4]	1,360	49,612
1999	[4]	2,236	[4]	1,547	53,390
2000	**[4]**	**2,520**	**[4]**	**1,461**	**42,441**
Maui					
1996	[4]	[4]	[4]	7,515	116,444
1997	[4]	[4]	[4]	8,219	[3] 121,072
1998	[4]	[4]	[4]	8,951	124,816
1999	[4]	[4]	[4]	9,851	125,375
2000	**[4]**	**[4]**	**[4]**	**9,947**	**110,603**

* = Less than $50,000.

[1] Flowers, foliage, and nursery products.

[2] Total crop values shown for individual counties are actual. Sum of individual commodities may not add to total. Forage crops' and Forest product's value combined and included in total crop value.

[3] Revised.

[4] Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

SUMMARY: Value of livestock sales, total value of crop, livestock sales, aquaculture, and government payments, by counties, 1996-2000

Year	Cattle [1]	Hogs [1]	Milk	Eggs	Total livestock [2]	Aquaculture	Total crops, livestock and aquaculture [3]	Government payments [4]
				1,000 dollars				
State								
1996	13,175	6,585	29,234	12,963	67,017	15,655	511,343	580
1997	14,323	4,902	29,479	12,986	67,799	16,600	[5] 504,705	554
1998	16,861	5,235	33,293	11,220	72,708	16,620	510,062	23
1999	16,806	5,072	31,270	10,803	69,881	18,102	531,094	820
2000	**19,204**	**4,425**	**28,102**	**10,636**	**68,278**	**22,170**	**521,409**	**11,927**
Counties:								
Hawaii								
1996	8,168	455	[6]	[6]	16,732	13,197	155,357	NA
1997	9,658	404	[6]	[6]	19,078	13,380	[5] 163,195	NA
1998	11,312	420	[6]	[6]	20,846	13,383	155,905	NA
1999	12,363	569	[6]	[6]	22,531	13,377	157,847	NA
2000	**14,138**	**475**	**[6]**	**[6]**	**26,075**	**16,009**	**170,463**	**NA**
Honolulu								
1996	713	3,754	19,130	9,905	35,435	2,055	158,535	NA
1997	581	3,036	19,204	10,002	34,909	2,120	[5] 146,101	NA
1998	514	3,451	21,838	8,193	36,189	2,100	162,919	NA
1999	551	3,143	23,300	7,821	36,917	2,333	181,657	NA
2000	**556**	**2,637**	**19,387**	**7,509**	**31,956**	**2,985**	**184,479**	**NA**
Kauai								
1996	869	879	[6]	[6]	4,170	NA	69,924	NA
1997	1,082	454	[6]	[6]	4,000	[6]	63,645	NA
1998	1,394	539	[6]	[6]	5,116	[6]	54,979	NA
1999	1,027	466	[6]	[6]	4,543	[6]	59,731	NA
2000	**1,280**	**378**	**[6]**	**[6]**	**3,852**	**[6]**	**48,475**	**NA**
Maui								
1996	3,425	1,497	[6]	[6]	10,680	403	127,527	NA
1997	3,003	1,008	[6]	[6]	9,813	[6]	[5] 131,764	NA
1998	3,641	825	[6]	[6]	10,557	[6]	136,259	NA
1999	2,865	894	[6]	[6]	5,890	[6]	131,859	NA
2000	**3,230**	**935**	**[6]**	**[6]**	**6,395**	[6]	**117,992**	**NA**

NA = Not available.

[1] Excludes interfarm sales; includes out-of-State sales of slaughter cattle and feeder calves.

[2] Sum of individual commodities may not add to total. Includes sheep, wool, turkeys, horses, honey, beeswax, broilers, and chickens.

[3] Total includes aquaculture beginning 1994.

[4] Includes all government payments, such as Agricultural Conservation Program, Cattle Indemnity Payment Program, Dairy Indemnity Payment Program, Emergency Conservation Program, Forestry Incentives Program, Emergency Feed Program, wool payments, and sugar support.

[5] Revised.

[6] Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

Farm Business Balance Sheet, State of Hawaii, December 31, 1996-99

	1996	1997	1998	1999
		Thousand dollars		
Farm assets	3,627,681	3,552,630	[1] 3,766,429	**3,643,782**
Farm debt [2]	233,660	250,756	264,786	**257,846**
Real estate	136,728	145,236	156,906	**149,929**
Nonreal estate	96,932	105,520	107,880	**107,917**
Equity	3,394,021	3,301,874	[1] 3,501,643	**3,385,936**
Ratio:				
Debt/equity	6.9	7.6	[1] 7.6	**7.6**
Debt/assets	6.4	7.1	[1] 7.0	**7.1**

[1] Revised.
[2] Excludes debt for nonfarm purposes.
Source: Economic Research Service, USDA.

Farm Financial Indicators - value added to the Hawaii economy by the agricultural sector via the production of goods and services, 1996-2000

	1996	1997	1998	1999	2000
			Thousand dollars		
Final crop output	431,607	423,067	423,008	444,162	443,868
Final animal output	80,739	93,303	87,687	84,254	79,553
Services and forestry	33,929	32,801	31,730	33,617	34,552
Final agricultural sector output [1]	546,275	549,171	542,425	562,033	557,973
less: Intermediate consumption outlays	213,712	202,303	195,737	195,356	202,231
Farm origin	45,728	42,685	39,988	35,654	35,562
Manufactured inputs	72,224	69,959	63,983	63,573	70,262
Other intermediate expenses	95,760	89,659	91,766	96,129	96,407
plus: Net government transactions	41,620	41,575	41,600	40,750	30,344
Gross value added	290,943	305,293	305,088	325,926	325,398
less: Capital consumption	46,357	37,119	37,289	37,599	38,670
Net value added [1]	244,586	268,174	267,799	288,327	286,728
less: Factor payments	198,973	191,905	202,289	225,528	222,824
Employee compensation (total hired labor)	162,891	156,498	165,992	186,274	182,388
Net rent received by nonoperator landlords	16,549	15,976	16,486	19,414	20,210
Real estate and nonreal estate interest	19,533	19,431	19,811	19,840	20,226
Net farm income [1]	45,613	76,269	65,510	62,799	63,904

[1] Final sector output is the gross value of the commodities and services produced within a year. Net value-added is the sector's contribution to the Hawaii economy and is the sum of the income from production earned by all factors-of-production. Net farm income is the farm operators' share of income from the sector's production activities. The concept presented is consistent with that employed by the Organization for Economic Cooperation and Development.
Source: Economic Research Service/USDA. E-Mail: rogers@ers.usda.gov. Revised: July 30, 2001.

RECORD HIGHS AND LOWS

Record highs and lows for selected items, State of Hawaii

Item	Unit	Record high		Record low		Year estimate started
		Quantity	Year [1]	Quantity	Year [1]	
Anthuriums						
Area in production	1,000 sq. ft.	20,908	1983	7,013	1964	1964
Total sold	1,000 dozs.	2,532	1980	216	1959	1959
Price [2]	$/doz.	9.09	1997	.73	1966	1959
Avocados						
Harvested	Acres	330	1986	90	1975	1946
Production	1,000 lbs.	1,600	1982	400	1996	1946
Price [2]	¢/lb.	60.0	1999	6.1	1959	1946
Bananas						
Harvested	Acres	1,550	2000	550	1977	1946
Production	1,000 lbs.	29,000	2000	4,470	1983	1946
Price [2]	¢/lb.	41.0	1992	4.6	1946	1946
Cabbage, Head						
Harvested	Acres	740	1947	370	1971	1946
Production	1,000 lbs.	15,750	1989	6,800	1953	1946
Price [2]	¢/lb.	22.0	1995	3.0	1959	1946
Coffee						
Harvested	Acres	6,800	2000	1,650	1985	1946
Production	1,000 lbs.	18,496	1957	990	1982	1946
Price [2]	¢/lb.	390.0	1989	17.8	1946	1946
Foliage, potted (indoor)						
Sales (value)	$1,000	16,985	2000	171	1972	1972
Ginger Root						
Harvested	Acres	360	2000	11	1974	1946
Production	1,000 lbs.	18,000	1998	352	1974	1946
Price [2]	¢/lb.	92.3	1982	16.2	1949	1946
Guavas						
Harvested	Acres	1,040	1990	60	1957	1955
Production	1,000 lbs.	24,300	1990	1,737	1957	1955
Price [2]	¢/lb.	15.0	1990	3.1	1956	1955
Macadamia nuts						
Harvested	Acres	19,300	1995	830	1953	1946
Production	1,000 lbs.	58,000	1997	630	1946	1946
Price [2]	¢/lb.	90.0	1988	15.2	1946	1946
Papayas						
Harvested	Acres	2,650	1985	320	1952	1946
Production	1,000 lbs.	80,500	1984	5,525	1947	1946
Price [2]	¢/lb.	48.9	1997	3.2	1946	1946

See footnotes at end of table.

Continued

Record highs and lows for selected items, State of Hawaii -- Continued

Item	Unit	Record high		Record low		Year estimate started
		Quantity	Year [1]	Quantity	Year [1]	
Pineapples						
Total in crop	Acres	76,700	1957	19,900	1997	1946
Production	1,000 tons	1,048	1955	324	1997	1950
Value (farm)	$1,000	107,775	1991	29,700	1951	1950
Sugar [3]						
Harvested	Acres	145,000	1933	30,300	1998	1909
Yield/acre (sugar)	Tons/acre	12.47	1986	4.81	1910	1909
Production (raw sugar)	1,000 tons	1,234	1966	301	2000	1909
Price [2] (sugar)	$/Ton	633.00	1974	52.00	1940	1909
Taro						
Harvested	Acres	1,020	1948	320	1980	1946
Production	1,000 lbs.	14,195	1948	5,440	1983	1946
Price [2]	¢/lb.	53.0	2000	3.1	1949	1946
Tomatoes						
Harvested	Acres	600	1950	150	1972	1946
Production	1,000 lbs.	16,800	1999	3,300	1972	1946
Price [2]	¢/lb.	65.0	1990	9.1	1947	1946
Watermelons						
Harvested	Acres	870	1950	125	1979	1946
Production	1,000 lbs.	20,400	1995	1,130	1979	1946
Price [2]	¢/lb.	25.7	1981	6.4	1955	1946
Cattle and calves						
Jan. 1 inventory	Head	249,000	1971	130,000	1946	1946
Production (lv. wgt.)	1,000 lbs.	64,750	1989	25,470	1953	1946
Price [2]	$/cwt.	57.50	1993	12.30	1946	1946
Hogs and pigs						
Dec. 1 inventory	Head	72,000	1965	26,000	2000	1960
Production (lv. wgt.)	1,000 lbs.	13,159	1978	5,580	2000	1960
Price [2]	$/cwt.	83.10	1998	29.50	1964	1960
Milk						
Marketings	Million lbs.	157.1	1988	65.2	1946	1946
Production per cow	lbs./cow	14,494	1998	8,750	1960	1960
Price [2]	$/cwt.	26.50	1999	6.75	1946	1946
Eggs						
Layers Dec. 1	Head	1,037,000	1974	302,000	1950	1950
Production	Million eggs	229.3	1979	120.0	1958	1958
Price [2]	¢/doz.	90.6	1997	39.2	1968	1958

[1] In case of a tie, the most recent year was used.
[2] Prices are annual or crop-year average.
[3] Primary data source, Hawaiian Sugar Planters' Association.